

## *Zale lunifera* (Bold-based Zale Moth)

### Priority 3 Species of Greatest Conservation Need (SGCN)

**Class:** *Insecta* (Insects)

**Order:** *Lepidoptera* (Butterflies, Skippers, And Moths)

**Family:** *Noctuidae* (Noctuid Moths)

#### General comments:

Only 2-3 extant EOs; habitat rare and limiting in ME; moderate survey effort, but should be looked for again in other ME pitch pine/scrub barrens; specimen ID difficult

#### Species Conservation Range Maps for Bold-based Zale Moth:

Town Map: [Zale lunifera\\_Towns.pdf](#)

Subwatershed Map: [Zale lunifera\\_HUC12.pdf](#)

#### SGCN Priority Ranking - Designation Criteria:

**Risk of Extirpation:** NA

**State Special Concern or NMFS Species of Concern:**

*Zale lunifera* is listed as a species of Special Concern in Maine.

**Recent Significant Declines:** NA

**Regional Endemic:** NA

**High Regional Conservation Priority:** NA

**High Climate Change Vulnerability:** NA

**Understudied rare taxa:**

Recently documented or poorly surveyed rare species for which risk of extirpation is potentially high (e.g. few known occurrences) but insufficient data exist to conclusively assess distribution and status. \*criteria only qualifies for Priority 3 level SGCN\*

Notes:

**Historical:** NA

**Culturally Significant:** NA

#### Habitats Assigned to Bold-based Zale Moth:

##### Formation Name      Northeastern Upland Forest

Macrogroup Name      Central Oak-Pine

**Habitat System Name:** Central Appalachian Dry Oak-Pine Forest    **Notes:** *potential; where host plant (scrub oak) present*

**Habitat System Name:** Northeastern Interior Pine Barrens    **\*\*Primary Habitat\*\***    **Notes:** *where host plant (scrub oak) present*

Macrogroup Name      Northern Hardwood & Conifer

**Habitat System Name:** Northeastern Coastal and Interior Pine-Oak Forest    **Notes:** *potential; where host plant (scrub oak) present*

#### Stressors Assigned to Bold-based Zale Moth:

No Stressors Currently Assigned to Bold-based Zale Moth or other Priority 3 SGCN.

#### Species Level Conservation Actions Assigned to Bold-based Zale Moth:

No Species Specific Conservation Actions Currently Assigned to Bold-based Zale Moth or other Priority 3 SGCN.

#### Conservation Actions Associated with the Dry Barrens Lepidoptera Guild:

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#### Conservation Action

**Category:** Species Management

**Biological Priority:** critical

**Type:** new

Prepare occurrence maps and pesticide spray consultation guidelines for rare Lepidoptera and distribute to strategic partners including Maine Bureau of Pesticides Control.

#### Stressor(s) Addressed By This Conservation Action

Agricultural and Forestry Effluents

#### Conservation Action

**Category:** Habitat Management

**Biological Priority:** critical

**Type:** new

Conduct a statewide review of potential high quality barrens habitat that is threatened by succession and identify strategic habitat restoration actions for implementation by key conservation partners.

#### Stressor(s) Addressed By This Conservation Action

Fire and Fire Suppression

### Broad Taxonomic Group Conservation Actions:

Additional relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-1.

### Habitat Based Conservation Actions:

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-15. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

*The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.*